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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,086	02/26/2002	Taketoshi Hibi	0925-0192P-SP	8613
2292	7590	07/13/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SMITH, ARTHUR A	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/082,086

Applicant(s)

HIBI ET AL.

Examin r

Arthur A Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2, 4-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 2,8-13 and 18-21 is/are allowed.
- 6) ☒ Claim(s) 1 and 14-17 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

((b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 14-17, are rejected under 35 U.S.C. 102(b) as being anticipated by Inbar et al. (US 5963276).

In reference to claims 1 and 14-17, Inbar et al. discloses an optical source device comprising: a lamp, ref. 280; a beam shaping optical system including a light uniforming element for uniforming a light intensity distribution in a plane perpendicular to the direction of propagation of the received emitting light of the lamp, ref. 286 and 292 (see col. 14 lines 39-50); an optical deflector having a plurality of adjustable mirror elements for changeably reflecting the received emitting light of the beam shaping optical system in either a first direction or a second direction, col. 14 lines 51-53 (It is the inherent functions of DMDs to operate in both on and off states where light is directed in one direction in the on state and a second direction in the off state); and an optical reflector

for reflecting light reflected in said one of two directions, along an axis of said one of two directions, col. 14 lines 53-57.

Claims 1 and 14-17, are rejected under 35 U.S.C. 102(e) as being anticipated by Dubinovsky et al. (US 2002/0149852 A1).

In reference to claims 1 and 14-17, Dubinovsky et al. discloses an optical source device comprising: a lamp, ref. 102; a beam shaping optical system including a light uniforming element for uniforming a light intensity distribution in a plane perpendicular to the direction of propagation of the received emitting light of the lamp, ref. 105; an optical deflector having a plurality of adjustable mirror elements for changeably reflecting the received emitting light of the beam shaping optical system in either a first direction or a second direction, ref. 104 and paragraph 46; and an optical reflector for reflecting light reflected in said one of two directions, along an axis of said one of two directions, paragraphs 47-48.

Allowable Subject Matter

Claims 2, 8-13 and 18-21 are allowed.

Claims 4-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or anticipate the claimed limitation of the optical reflector having a polarization converting element (claim 2); an average ON ratio calculating unit (claim 4); optical deflectors provided respectively for the plurality of

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colors... optical reflectors provided for the respective optical deflectors... (claim 8); a control unit that calculates increase rates of the plurality of colors (claim 11); selectively controlling an amount of light being directed towards a mirror that is provided in the reflector assembly by a shutter element (claim 18); wherein the optical reflector includes a converter for converting a light intensity of the deflected light before reflecting the deflected light (claim 19).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur A Smith whose telephone number is (571) 272 2129. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays during the same hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'A. Smith', with a stylized, cursive script.

Arthur A. Smith
July 9, 2004